Colorado Department
of Public Health
and Environment

July 9, 1999

Mr Joe Legare
RFCA Coordinator
Department of Energy-RFFO
P O Box 928
Golden CO 80402-0928

RE Annual Update for the Historical Release Report (September 1997)

Dear Mr Legare

The Colorado Department of Public Health and Environment (CDPHE) and the Environmental Protection Agency (EPA) have reviewed the 1997 Annual Update for the Historical Release Report CDPHE and EPA are providing the attached comments and are also responding to recommendations for No Action or No Further Action (NFA) by categorizing each PAC/IHSS into three groups 1 Concur with NFA, 2 More information required, and 3 Do not concur with NFA To adequately justify NFA, each recommendation should include the specific criteria from RFCA Appendix 6 (as also described in the RFCA Implementation Guidance Document) which allow NFA to be proposed If the justification is based on specific measurements or risk evaluations, then those values, exposure scenarios, etc should be extracted from the original data source and summarized in text or tables The adequacy of QA/QC that was performed on analyses should also be mentioned In some cases, providing maps showing sampling locations would make a review of the narratives more complete and efficient

1 The agencies concur with the recommendation for NFA for the following PACs/IHSSs

300-715	400-191	800-107
700-111 84	600-117 3	800-145
NE-111 1	600-152	800-147 2
NE-156 2	800-102	900-113
NE-167 1	800-103	900-119 1
SE-209	800-104	900-119 2
300-135	800-105 1	900-130
300-151	800-105 2	900-141
300-181	800-106	900-210
300-188		

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2 The agencies require more information to be able to approve NFA for the following PACs/IHSSs

900-1307	SW-133 6	600-189
NE-110	SW-1701	600-1001
NE-216 2	300-156 1	700-123 1
NE-216 3	600-164 1	700-1102
SW-133 5		

3 The agencies do not concur with the recommendation for NFA for the following PACs/IHSSs

NE-142 1	NE-142 6	SE-142 10
NE-142 2	NE-142 7	SE-142 11
NE-142 3	NE-142 8	900-183
NE-142 4	NE-142 9	900-109
NE-142 5		

If you have any questions concerning these comments, please contact Carl Spreng at 303-692-3358 or Gary Kleeman at 303-312-6246

Sincerely,

Steven H Gunderson
RFCA Project Coordinator
Colorado Department of Public
Health and Environment

Tim Rehder
Rocky Flats Project Manager
Environmental Protection Agency

cc Norma Castañeda, DOE
Laura Brooks, K-H
Nick Demos, RMRS
Dan Miller, AGO
Steve Tarlton, CDPHE-RFOU
Susan Chaki, CDPHE

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Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
and
Environmental Protection Agency

comments on

Annual Update for the Historical Release Report
September 1997 (Rev 0)
(RF/RMRS-97-073.UN)

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1 PAC 300-715

This narrative should identify the specific NFA criteria used to justify the NFA recommendation In this case, a source evaluation was conducted, which indicated that no current or potential source exists

2 PAC 700-1114

The NFA recommendation should specify that sampling indicates no current or potential source exists

3 PAC 700-1115

The "RFCA UST cleanup thresholds" mentioned on page 12 should be identified

4 PAC 900-1307

The phrase "so that no current or potential source exists" should be added to the NFA recommendation A summary of the analytical results (chemical and radiological) which confirmed the removal of contaminated soil must be included

5 PAC NE-110 (IHSS 110)

The Physical/Chemical Description of Constituents Released section on page 17 describes conditions and level of knowledge prior to the remedial action It should be updated based on knowledge gained from taking the action

The "black material" mentioned in the second paragraph on page 18 should be identified as depleted uranium

The statement on page 18 that, "disposal of the 2,400 gallons of water and lathe coolant from Building 444 occurred in another trench and not T-3" should be documented and considered in determining the Environmental Restoration rankings for the remaining East Trenches

The justification for NFA should be that remaining contaminant levels are below action levels However, the stated action levels ("cleanup values") have recently been modified as a part of the annual review process The Tier I action levels for carbon tetrachloride

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and tetrachloroethene (PCE) are 3 56 mg/kg and 3 15 mg/kg respectively Therefore, one of the verification samples for PCE exceeds the Tier I action level and all three detections for PCE and the one for carbon tetrachloride exceed the Tier II action level The text should be revised to state that, "These cleanup values were also consistent " Leaving levels above Tier II action levels requires an explanation of how these levels are not expected to cause surface water to exceed standards This explanation can refer to the condition in the PAM that source removal in the trench would be considered complete if verification samples were below cleanup levels or upon reaching groundwater or bedrock The rationale for this condition was that any remaining contamination beyond these criteria would be subject to groundwater remediation

The first statement in the Comments section should be revised to state, "Trenches T-1 through T-13 "

6 PAC-111 1 (IHSS 111 1)
The last sentence on page 21 should be revised to state that, "A letter to EPA "

The 2,400 gallons of water and lathe coolant from Building 444, which are mentioned on page 20 as being disposed of in one of the East Trenches, has not been found in any of the trenches excavated so far This should be considered when determining the Environmental Restoration rankings for the remaining East Trenches

The justification for NFA should be that remaining contaminant levels in subsurface soil are below action levels However, the stated action levels ("cleanup values") have recently been modified as a part of the annual review process The Tier I action levels for trichloroethene (TCE) tetrachloroethene (PCE) are 3 28 mg/kg and 3 15 mg/kg respectively Therefore, the trench bottom verification samples exceed the Tier I action level for TCE or PCE in primary grids 26, 29, 30, and 32 All detections above quantitation limits exceed Tier II action levels The text should be revised to state that, "The cleanup values stipulated in the PAM (DOE, 1996c) were also consistent " The agreement among the agencies concludes that the conditions for source removal in the PAM had been met once bedrock or groundwater was reached The rationale for this condition was that any remaining contamination beyond these criteria would be subject to groundwater remediation The changes to action levels does not affect the agreement among the agencies

The approval of this NFA recommendation may need to be reviewed if radionuclide soil action levels are revised in the future

7 PACs NE-142 1, NE-142 2, NE-142 3, & 142.4 (IHSSs 142.1, 142 2, 142.3, & 142 4)
Since this series of ponds serve as contaminant sinks and will continue to receive contaminants from the Site, particularly during continuing D&D and ER activities, it is premature to consider them for NFA In addition, there is uncertainty about how the ponds will be used/managed in the future

Instead of mentioning "low levels of radioactivity" on page 29, specific activity levels should be stated On page 32, the "current and future onsite receptors" should be specified The statement on page 33 that indicates that the OU 6 CAD/ROD is being prepared can be deleted

8 PACs NE-142 5, NE-142 6, NE-142 7, NE-142 8 & 142 9 (IHSSs 142 5, 142 6, 142 7, NE-142 8 & 142 9)

Since this series of ponds will continue to receive contaminants from the Site, particularly during continuing D&D and ER activities, it is premature to consider them for NFA It is also uncertain as to how the ponds will be managed in the future

On page 39, the "current and future onsite receptors" should be specified The statement on page 40 that indicates that the OU 6 CAD/ROD is being prepared can be deleted

9 PAC NE-156 2 (IHSS 156 2)

The NFA justification should be that the AOC that included this PAC has passed the CDPHE conservative screen

10 PAC NE-167 1 (IHSS 167 1)

The discussion on page 46 concerning the risk evaluation should identify the one current and four future receptors referred to by the statement, "all current and future onsite receptors " In Table 3, the units for two of the contaminants are expressed in units of volume rather than in units of mass as is usual

11 PACs NE-216 2 & NE-216 3 (IHSSs 216 2 & 216 3)

The text on page 50 discussing NFA justification must be more specific The statement that contamination associated with these IHSSs poses "no significant risk" is inadequate The "remediation goals" to which the chromium concentrations were compared must be identified If these goals are the PPRGs, the most recently revised PPRGs should be reviewed The text should also report the measured radionuclide activity levels which support the statement that the surface soils are below levels which would produce a 15 mrem/year dose to an open space user The 15 mrem/year dose to an open space user was not established as a Tier I action level since it is an order of magnitude greater than the 85 mrem dose to a resident Therefore, the significance of comparing to that level is unclear and does not constitute grounds for NFA

12 PACs NE-142 10 & NE-142 11 (IHSSs 142 10 & 142 11)

Since this series of ponds serve as contaminant sinks and will continue to receive contaminants from the Site, particularly during continuing D&D and ER activities, it is premature to consider them for NFA In addition, there is uncertainty about how the ponds will be used/managed in the future

The "SE" prefix should be removed from the IHSS Reference Numbers on page 51 The "low levels of radioactivity" mentioned on page 52 should be specified On page 53, the "current and future onsite receptors" should be identified

13 PAC SE-209 (IHSS 209)
The boundary for this IHSS does not contain the entire disturbed area evident on aerial photographs

14 PAC SE-133 5 (IHSS 133 5)
The discussion of the recommendation for NFA on page 59 should identify the "contaminants associated with the incinerator facility" The text should also report the measured radionuclide activity levels which support the statement that the surface soils are below levels which would produce a 15 mrem/year dose to an open space user The 15 mrem/year dose to an open space user was not established as a Tier I action level since it is an order of magnitude greater than the 85 mrem dose to a resident Therefore, the significance of comparing to that level is unclear and does not constitute grounds for NFA

15 PAC SE-133 6 (IHSS 133 6)
On page 59, the discussion of the recommendation for NFA should identify the "contaminants associated with the Concrete Wash Pad" The text should also report the measured radionuclide activity levels which support the statement that the surface soils are below levels which would produce a 15 mrem/year dose to an open space user The 15 mrem/year dose to an open space user was not established as a Tier I action level since it is an order of magnitude greater than the 85 mrem dose to a resident Therefore, the significance of comparing to that level is unclear and does not constitute grounds for NFA

16 PAC SW-1701 (IHSS 1701)
In the discussion of the recommendation for NFA on page 63, the "contaminants associated with the suspected ash pit finding" should be identified The text should also report the measured radionuclide activity levels which support the statement that the surface soils are below levels which would produce a 15 mrem/year dose to an open space user The 15 mrem/year dose to an open space user was not established as a Tier I action level since it is an order of magnitude greater than the 85 mrem dose to a resident Therefore, the significance of comparing to that level is unclear and does not constitute grounds for NFA

17 PAC 300-151 (IHSS 151)
Since sampling indicates no current source exists, that is the NFA criterion that applies

18 PAC 300-156 1 (IHSS 156 1)
The justification for NFA cannot be based on "All analytical data were below PRGs" This fact may allow for NFA justification based on a comparison to action levels (PPRG values are used as action levels for surface soil and for inorganics in subsurface soil), or through a risk evaluation This section recommending NFA should include a summary of the analytical data which shows, by comparison to action levels or through a risk evaluation, that a NFA criterion is met

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19 PAC 400-191 (IHSS 191)
The "exposure conditions" used to evaluate the "threat of adverse health effects" should be provided

20 PACs 600-117 3 & 600-152 (IHSSs 117 3 & 152)
The presumed disposal of contaminated asphalt in the East Trenches should be noted for Environmental Restoration Ranking

21 PAC 600-164 1 (IHHS 164 1)
The statement on page 90 that "there were no detections above PRGs " does not specify either the values of the detections or the exposure scenario of the PRGs This IHSS will likely qualify for one or more of the NFA criteria once this information is provided

22 PAC 600-189 (IHSS 189)
Since the location and quantities of acid releases are not documented, it is implausible to state on page 93 that "small amounts of acid spilled " The evidence and basis for proposing that the cumulative hazard indices for noncarcinogenic health effects are less than or equal to precisely 0 01 are also unclear Neutralization may well have rendered the acid harmless and a few pH verification measurements would be relatively inexpensive and could support an NFA based on the lack of a current source

23 PAC 600-1001
The agencies concur that the source of the June 23, 1997 occurrence no longer exists and that this portion therefore qualifies for NFA The rest of this PAC requires further investigation, as stated

24 PAC 700-123 1 (IHSS 123 1)
The statement on page 100 that, "No threat of adverse health effects exist under the exposure conditions evaluated" leaves the exposure scenario applied unspecified The referenced OU 8 Data Summary Report is unavailable in the State records If this report indicates that essentially no contamination remained when this IHSS was sampled, then the relevant NFA criterion is that no current source exists

25 PAC 700-1102
The updated subsurface soil action levels for Araclor 1260 are 5 31 mg/kg (Tier II) and 531 mg/kg (Tier I) Since the 70 ppm left in the subsurface exceeds the Tier II limit, an evaluation is required to determine if this level is protective of surface water and ecological resources

26 PAC 800-147 2 (IHSS 147 2)
The applicable criterion for no action is that sampling indicates that no source exists or that measured contaminant levels are below action levels for the appropriate medium

27 PAC 900-109 (IHSS 109) Ryan's Pit
The thermal desorption unit performance standards referenced in the NFA recomendation

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are not a NFA criterion Neither are the PPRGs for a construction worker scenario, which are referenced in the Closeout Report for this IHSS Analytical results of confirmation samples along the south wall of the trench exceed current Tier II action levels for several VOCs PCE, TCE, toluene, and ethylbenzene This exceedance requires an evaluation of the impacts of these remaining contaminants on surface water and ecological resources The south wall confirmation samples also exceed the Tier I action levels for PCE and TCE This IHSS cannot, therefore, be considered for NFA

28 PAC 900-113 (IHSS 113)
The justification for NFA needs to additionally state that by meeting the PAM objectives, specific NFA criteria were also met At the top of page 135, IHSS 113 is referred to as PAC NE-113 rather than PAC 900-113

29 PAC 900-130 (IHSS 130)
The northing for the approximate location should apparently be N748,000 rather than N746,000 In three instances in the text, this IHSS is referred to as PAC 800-130 rather PAC 900-130 as in the title and in the Table of Contents The meaning and relevance of the second sentence at the top of page 145 is unclear, particularly its reference to PAC 800-145

30 PAC 900-141 (IHSS 141)
The statement on page 147 that, "In June 1973, air samples were unusually high " is vague and should specify the contaminant and the measurement The HHRA results indicate that the AOC which includes IHSS 141 would pass a risk evaluation and the CDPHE Conservative Screen This should be stated as the NFA justification This discussion should also mention which specific current and future onsite receptors the HHRA assessed The Comment section mentions that the PAC boundary was extended to include the area of the sludge drying beds This seems to be in contrast to the Fate of Constituents Released to Environment section which states that this area is being investigated as a separate action

31 PAC 900-183 (IHSS 183)
One nearby borehole is not sufficient to characterize this building which contained toxic gases This IHSS should be treated similarly to other IHSSs associated with buildings Once the 903 Lip Area remediation allows access and the building is down, the slab can be tested (e g , rinsate sampling or chips) If warranted by these tests, additional soil samples adjacent to or under the slab can be analyzed

32 PAC 900-210 (IHSS 210)
"No positive detections" indicates that the appropriate no action justification for this IHSS is that no current or potential source could be found

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